

Amendments to the Abstract:

Please replace the Abstract with the following rewritten Abstract:

Methods, apparatuses, and systems are presented for positioning a sensing head relative to a workpiece, involving a control unit operative to provide a plurality of control signals to iteratively control positioning of the sensing head relative to the workpiece, a plurality of air injectors disposed and fixedly connected on a periphery of the sensing head, each of the air injectors capable of being independently controlled to eject a gas between the sensing head and the workpiece to create an air bearing and affect positioning of the sensing head relative to the workpiece in response to at least one of the control signals, and a plurality of sensors providing a plurality of feedback signals to the control unit, the feedback signals containing information relating to positioning of an optical imaging sensing head relative to the workpiece.